AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A collection of one or more microfluidic devices which together carry a plurality of microchannel structures each of which comprises a reaction microcavity in which there is a solid phase with an immobilized affinity ligand L,

   wherein the reaction microcavity and the solid phase have surfaces exposing a plurality of polar functional groups such that said surfaces are hydrophilic, and:

   (i) the plurality comprises two or more different sets of microchannel structures, and

   (ii) the affinity ligand L is directed to the same counterpart (binder, B) independent of set, and

   (iii) the sets differ with respect to

      a) the capacity for binder B per reaction microcavity and/or the capacity per unit volume of the solid phase in a reaction microcavity, and/or

      b) the base matrix of the solid phase

   between the sets but are equal within each set.

2. (Previously Presented) The collection according to claim 1, wherein the difference is with a factor ≥ 1.2 for at least one of the sets of the collection compared to the binding capacity for the set having the lowest binding capacity.

3. (Previously Presented) The collection according to claim 1, wherein at least one of said devices comprises

   a) at least two of said sets of microchannel structures, and/or

   b) only one set of microchannel structures, with the proviso that the collection comprises two or more devices which are different with respect to the kind of sets they carry.

4. (Previously Presented) The collection according to claim 1 being intended for separately performing one or more affinity protocols that differ with respect to the reactants

involved and/or the order of addition of the reactants and/or the concentration range in which the reactants are used, each of said different protocols utilizing an affinity reaction between

(i) a solute S, and

(ii) a conjugate comprising

(a) a binder B, and

(b) an affinity counterpart AC_S to the solute S,

wherein the affinity constant K_{L--B} for formation of the complex L--B between the affinity ligand L and the binder B, i.e. $K_{L--B} = [L][B]/[L--B]$, is at most 10^3 times, such as at most 10^2 times, the corresponding affinity constant for streptavidin and biotin.

5. (Previously Presented) The collection according to claim 4, wherein L is selected amongst biotin-binding compounds and streptavidin-binding compounds, respectively, or vice versa.

6. (Previously Presented) The collection of claim 4, wherein L has two or more binding sites for B.

7. (Previously Presented) The collection according to claim 1, wherein

(a) that each set on a device is grouped into one or more groups of fluidly equivalent microchannel structures, and

(b) that each group is located to a particular subarea of the device.

8. (Currently Amended) The collection according to claim 1, wherein said reaction microcavity in at least one ~~, preferably all,~~ of said microchannel structures in the upstream direction is connected to a volume-metering unit.

9. (Currently Amended) The collection according to claim ~~7~~ 8, wherein said volume-metering unit is part of an inlet arrangement for liquid.

10. (Currently Amended) The collection according to claim ~~6~~ 7, wherein said reaction microcavity in at least one of said microchannel structures in the upstream direction is connected to a volume-metering unit and wherein said volume-metering unit within at least one of said group(s) ~~are~~ is part of a distribution manifold for distributing liquid to the reaction microcavities of the group, with the proviso that each of said at least one group comprises two or more microchannel structures.

11. (Currently Amended) The collection according to claim ~~7~~ 8, wherein the inner wall of each of said volume-metering units ~~have~~ has a sufficient hydrophilicity for said unit to filled by capillarity once an aqueous liquid have entered the unit, and b) a valve at its outlet end~~, for instance a passive valve~~.

12. (Previously Presented) The collection according to claim 4, wherein at least one of the solute S and its affinity counterpart AC_S, and/or at least one of the binder B and the ligand L comprise a structure selected from the group of peptide structure consisting of poly/oligo-peptide and protein structure, carbohydrate structure, lipid structure including steroid structure, nucleotide structure including nucleic acid structure, and polymeric structure.

13. (Previously Presented) The collection according to claim 1, wherein said solid phase is in a dry state, preferably comprising in addition to the solid phase one or more bed-preserving agents.

14. (Previously Presented) The collection according to claim 13, wherein at least one of said one or more bed-preserving agents is a microcavity adherence agent.

15. (New) The collection according to claim 1, wherein surfaces of the microchannel structures that are to be in contact with aqueous samples expose a plurality of polar functional groups such that said surfaces are hydrophilic.